

Amendments to the Claims

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-21 (Canceled)

Claim 22 (Currently Amended): An Impedance electrical impedance cell sizing apparatus for characterizing particles suspended in a liquid, comprising a housing with a mixing chamber and a collection chamber separated by a polymer membrane containing an orifice for passage of the particles between the mixing chamber and the collection chamber for impedance determination of the particles, wherein a diameter the deviation of the orifice is in a range from 10 μm to 1,000 μm diameter along a longitudinal axis of the orifice ranges from $\pm 1\%$ to $\pm 10\%$ whereby a substantially homogenous electrical field at the centre of the orifice is provided.

Claim 23 (Currently Amended): An Impedance electrical impedance cell sizing apparatus according to claim 22, wherein the orifice has rounded edges at one of the sides of the membrane whereby perturbations of an electrical field at [[the]] an orifice entrance are minimized minimised and a substantially homogenous electrical field at

the center centre of the orifice ~~[[are]]~~ is provided.

Claim 24 (Currently Amended): An ~~Impedance~~ electrical impedance cell sizing apparatus according to claim 23, wherein ~~[[the]]~~ a radius of curvature of the rounded edges is substantially equal to ~~[[1/4'th]]~~ $\frac{1}{4}$ th the diameter of the orifice.

Claim 25 (Currently Amended): An ~~Impedance~~ electrical impedance cell sizing apparatus according to claim 22, wherein ~~[[the]]~~ a surface roughness of ~~[[the]]~~ an internal surface of the orifice is in ~~[[the]]~~ a range from 0 μm to 5 μm , whereby a substantially homogenous electrical field at the centre a center of the orifice ~~may be~~ is provided.

Claim 26 (Currently Amended): An electrical impedance cell sizing apparatus according to claim 22, wherein the orifice diameter ~~outside the rounding ranges from 10 μm to 1000 μm , such as~~ is in a range from 30 μm to 75 μm ~~[[,]] such as app. equal to 50 μm .~~

Claim 27 (Currently Amended): An electrical impedance cell sizing apparatus according to claim 22, wherein the orifice diameter ~~outside the rounding ranges from 5 μm to 200 μm , such as from 10 μm to 50 μm , such as app. equal to~~ is 50 μm .

Claim 28 (Currently Amended): An ~~impedance~~ electrical impedance cell sizing apparatus according to claim 22, wherein a length of the orifice-length ranges from 1 μm to 1000 μm ~~such as app. equal to 50 μm .~~

Claim 29 (Currently Amended): An ~~Impedance~~ electrical impedance cell sizing apparatus according to claim 22, wherein the membrane is positioned in a single-use cartridge.

Claim 30 (Currently Amended): An ~~Impedance~~ electrical impedance cell sizing apparatus according to claim 22, further comprising
a bore in ~~the~~ an outer surface of the housing for entrance of ~~the~~ a liquid sample, communicating with
a sampling member positioned in the housing for sampling the liquid sample and having a cavity for receiving and holding the liquid sample, the sampling member being movably positioned in relation to the housing in such a way that ~~in a first position~~ in a first position the cavity is in communication with the bore for entrance of the liquid sample into the cavity, and ~~in a second position~~ in a second position the cavity is in communication with the mixing chamber for discharge of the liquid sample into the mixing chamber.

Claim 31 (New): An electrical impedance cell sizing apparatus according to claim 22, wherein deviation of the orifice diameter along a longitudinal axis of the orifice ranges from +/- 1% to +/- 10%, whereby a substantially homogenous electrical field is provided at a center of the orifice.

Claim 32 (New): An electrical impedance cell sizing apparatus according to claim 22, wherein a largest cross-sectional dimension of the orifice is from 10 μm to 50 μm .